

ABBY J. VOGEL

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EDUCATION

Doctor of Philosophy in Biological Resources Engineering

University of Maryland, College Park, MD

Overall GPA: 3.5

Master of Science in Biological Resources Engineering, May 2004

University of Maryland, College Park, MD

Overall GPA: 3.4

Bachelor of Science in Biological Resources Engineering, May 2002

University of Maryland, College Park, MD

Major GPA: 3.6 (Overall GPA: 3.3)

EMPLOYMENT

National Institutes of Health

Bethesda, Maryland

Graduate Research Fellow

6/02 – present

NICHD, Laboratory of Integrative and Medical Biophysics, Section on Biomedical Stochastic Physics

- Co-authored one scientific paper for publication in a professional journal, one book chapter, and three conference proceeding papers
- Gave an oral presentation at a professional meeting and presented at five poster sessions
- Served as technical coordinator of the Fourth Inter-Institute Workshop on Optical Diagnostic Imaging from Bench to Bedside at the National Institutes of Health
- Conducted non-invasive imaging research to study quantitative effects of radiation on mouse skin leading to fibrosis
- Performed patient trials of Kaposi's Sarcoma (KS) and Complex Regional Pain Syndrome (CRPS) protocols using innovative diagnostic techniques
- Researched and oversaw the procurement of laboratory equipment and supplies

University of Maryland Terrapin Yearbook

College Park, Maryland

Editor in Chief (1/01-3/02), *Sports Editor* (3/99-1/01), *Business Manager* (10/99-3/02)

3/99 – 3/02

- Hired and managed staff of ten student workers
- Instructed employees to use Macintosh computers with Adobe Pagemaker and Photoshop software programs
- Created yearly budget and determined employee payroll
- Designed multiple sections of yearbook and edited all 320 pages and proofs
- Ensured deadlines and proofs were sent in on time

ORGANIZATIONS

- Omicron Delta Kappa – Sigma Circle (2001-present)
- Graduate Engineering Student Council (2004-present)
- Biological Resources Engineering Graduate Association (2004-present)
- Graduate Student Representative, University Senate Student Conduct Committee (2004-present)
- Graduate Student Senator and Student Affairs Committee Chair, University Senate (2003-2004)
- Graduate Student Representative, University Senate Nominations Committee (2004)
- Graduate Student Success Task Force member (2003-2004)
- Graduate Student Representative, University Senate Student Affairs Committee (2002-2003)
- Undergraduate Student Senator, University Senate Executive Committee (2001-2002)
- Maryland Media, Inc. Executive Board (2001-2002)
- Biological Resources Engineering Society (1999-2002)

PROFESSIONAL AFFILIATIONS

- D.C. Science Writers Association (DCSWA)
- Biomedical Engineering Society (BMES)
- The International Society for Optical Engineering (SPIE)
- Optical Society of America (OSA)
- Order of the Engineer – Link 137 (OE)

HONORS

- Taylor Publishing Yearbook Yearbook Semi-Finalist (Fall 2002)
- Who's Who Among Students in American Universities and Colleges (Spring 2002)
- A. James Clark School of Engineering Alumni Chapter Student Award (Spring 2002)
- National Collegiate Engineering Award (Fall 2001)
- Biological Resources Engineering Outstanding Junior Award (Spring 2001)

PUBLICATIONS AND PRESENTATIONS

- A. Vogel.** Non-Invasive Imaging Techniques as a Quantitative Analysis of Skin Damage due to Ionizing Radiation. Master of Science Thesis. Biological Resources Engineering. College Park, University of Maryland, May 2004.
- A. Vogel.** Picking a Bone With Chicken. University of Maryland Newsdesk. Available online: <http://www.newsdesk.umd.edu/scitech/release.cfm?ArticleID=1032>. February 4, 2005.
- A. Vogel,** M. Hassan, D. Hattery, V. Chernomordik, F. Hekmat, K. Aleman, K. Wyvill, L. Merced, R. Little, R. Yarchoan and A. H. Gandjbakhche. Non-invasive imaging techniques to study vascular tumor associated with Kaposi's sarcoma. Poster presented at the University of Maryland Bioscience Day, November 2004.
- A. Vogel,** M. Hassan, D. Hattery, S. Demos, A. Russo, Y. Tao and A. Gandjbakhche. Using non-invasive imaging techniques to assess the collagen breakdown in skin after radiation. Oral presentation at the SPIE Photonics West Conference, January 2004.
- A. Vogel,** M. Hassan, D. Hattery, S. Demos, A. Russo, Y. Tao and A. Gandjbakhche. Using non-invasive imaging techniques to assess the collagen breakdown in skin after radiation. Poster presented at the NIH Graduate Student Research Symposium, April 2004.
- A. Vogel,** M. Hassan, D. Hattery, S. Demos, A. Russo, Y. Tao and A. Gandjbakhche. Assessing the collagen breakdown after radiation in mouse model using multi-modality imaging techniques. Poster presented at the NIH Research Festival, October 2003.
- A. Vogel,** M. Hassan, D. Hattery, V. Chernomordik, F. Hekmat, K. Aleman, K. Wyvill, L. Merced, R. Little, R. Yarchoan and A. H. Gandjbakhche. Non-invasive imaging techniques to study vascular tumor associated with Kaposi's sarcoma. Poster presented at the NIH Research Festival, October 2002.
- A. Vogel,** M. Hassan, D. Hattery, S. Demos, A. Russo, Y. Tao and A. Gandjbakhche. Multimodality imaging techniques to assess the collagen breakdown in mouse model after radiation. Poster presented at the University of Maryland Bioscience Day, November 2003.
- D. Hattery, B. Hattery, M. Hassan, V. Chernomordik, **A. Vogel**, F. Hekmat, and A. Gandjbakhche. Optical Quantification of Epithelial Layer Thickness as a Measure of Oral Inflammation. Proceedings of Lasers in Dentistry IX; eds. Peter Rechmann D.D.S., Daniel Fried, and Thomas Hennig; Proc. of SPIE, 4950:1-10, 2003.
- M. Hassan, R. Little, **A. Vogel**, K. Aleman, K. Wyvill, R. Yarchoan and A.H. Gandjbakhche. Quantitative Assessment of Tumor Vasculature and Response to Therapy in Kaposi's Sarcoma Using Functional Noninvasive Imaging. Technology in Cancer Research and Treatment, 3(5): 451-7, October 2004.
- M. Hassan, D. Hattery, **A. Vogel**, V. Chernomordik, F. Hekmat, K. Aleman, K. Wyvill, L. Merced, R. Little, R. Yarchoan and A.H. Gandjbakhche. Multi-modality imaging techniques to assess Kaposi's Sarcoma associated with angiogenesis. Proceedings of 7th International Conference on Malignancies in AIDS and Other Immunodeficiencies: Basic, Epidemiologic and Clinical Research, Bethesda, Maryland, 2003.
- M. Hassan, D. Hattery, **A. Vogel**, V. Chernomordik, F. Hekmat, K. Aleman, K. Wyvill, L. Merced, R. Little, R. Yarchoan and A.H. Gandjbakhche. Multi-modality imaging techniques to study angiogenesis associated with Kaposi's Sarcoma. Second joint meeting EMBS/BMES conference, Houston, TX, 2002. 1139-40.
- M. Hassan, V. Chernomordik, **A. Vogel**, D. Hattery, I. Gannot, R. Yarchoan and A.H. Gandjbakhche. Infrared imaging for tissue characterization and function. Chapter 16, The Biomedical Engineering Handbook—Third Edition, CRC and IEEE press. In press.